2000 Utah Crash Summary

Robert L Flowers, Commissioner
Department of Public Safety
4501 South 2700 West
Salt Lake City, Utah 84119

David Beach, Director
Highway Safety Office
5263 So. Commerce Dr. #202
Salt Lake City, Utah 84107

Produced by:
Utah CODES (Crash Outcome Data Evaluation System)
Intermountain Injury Control Research Center
University of Utah School of Medicine

Table of Contents

Section 4: Bicyclist-Motor Vehicle Total Crashes, Injury Crashes and Fatal Crashes, 2000

Section 5: Motorcycle Total Crashes, Injury Crashes and Fatal Crashes, 2000

Section 6: Total Crashes, Injury Crashes and Fatal Crashes Involving Teenage Drivers, 2000

Section 7: Alcohol and Other Drug-Related Total Crashes, Injury Crashes and Fatal Crashes, 2000

Section 8: Speed-Related Total Crashes, Injury Crashes and Fatal Crashes, 2000

Section 9: Occupant Protection, 2000

Introduction

The Utah Crash Summary produced annually identifies and describes the trends and effects of traffic crashes in Utah. The statistics within the Utah Crash Summary describe factors that contribute to the occurrence of crashes, and crash-related injuries and fatalities. This report is designed to heighten awareness about traffic safety by allowing safety program specialists, public health personnel, and other interested individuals to identify areas where programs may be focused in an effort to reduce traffic-related injuries and fatalities.

The data for this summary is derived from Utah crash reports. These reports are completed by law enforcement officers throughout the state who collect data from crash scenes on public roadways. Information is collected when a crash involves injuries, fatalities, or at least $1,000 property damage; when the jurisdiction in which the crash occurs requires it; or when the responding officer determines that a report is warranted.

Crash reports are forwarded to the Utah Department of Transportation (UDOT) for central collection. UDOT reviews the crash report forms and enters the data into a database called the Crash Analysis Reporting System (CARS). Beginning in 1997, all private property crashes were excluded from CARS. Since private property crashes accounted for approximately 10% of crashes in previous years, the decrease in crashes since 1997 is due in part to the exclusion of private property crashes. Additional information is collected on fatal crashes and compiled into a separate database, the Fatality Analysis Reporting System (FARS). This database was used for the reporting of alcohol and other drug-related fatal crashes and fatalities.

This report was prepared by the Utah Crash Outcome Data Evaluation System (CODES) project located at the Intermountain Injury Control Research Center, University of Utah School of Medicine. For more information, please contact:

Stacey Knight
Utah Crash Outcome Data Evaluation System (CODES)
615 Arapeen Drive, Suite 202
Salt Lake City, Utah 84108
(801) 581-6410

This crash summary is available on the internet at http://www.utcodes.org

Definitions

Alcohol and Other Drug-Related Crash - A crash in which the investigating officer cited a driver for "driving under the influence" (DUI) or coded a contributing factor of "DUI", "had been drinking" or "under the influence of drugs". Since breath test or blood test results may not always be used to determine a person's alcohol and other drug content, these crashes may be underestimated.

Alcohol and Other Drug-Related Injury Crash - A non-fatal crash in which one or more persons are injured and in which the investigating officer cited a driver for "driving under the influence" (DUI), or coded a contributing factor of "DUI", "had been drinking" or "under the influence of drugs". Since breath test or blood test results may not always be used to determine a person's alcohol and other drug-related content, these injury crashes may be underestimated.

Alcohol and Other Drug-Related Fatal Crash - A crash resulting in one or more deaths and in which the drug / alcohol test was positive (blood or breath test) for any driver, pedestrian, or bicyclist involved in the crash. Alcohol and other drug-related fatal crash information is obtained as part of the FARS database.

Alcohol and Other Drug-Related Injury - A non-fatal injury resulting from an alcohol and other drug-related crash. Since breath test or blood test results may not always be used to determine alcohol and other drug-related crashes, these injuries may be underestimated.

Alcohol and Other Drug-Related Fatality - A death resulting from an alcohol and other drug-related crash. Since breath test or blood test results may not always be used to determine alcohol and other drug-related crashes, these fatalities may be underestimated.

Crash Participant - A person who is involved in a crash, including motor vehicle occupants, pedestrians and bicyclists.

Contributing Factor - The circumstances reported by the investigating officer surrounding a crash that contributed to the crash or the crash severity. Examples are "speed too fast", "fatigue" and "had been drinking".

Fatal Crash - A motor vehicle crash on public roadways resulting in one or more deaths. The death must occur within 30 days of the crash.

Injury Crash - A crash in which one or more persons sustained a possible injury, probable injury, or an incapacitating injury as recorded by the investigating officer.

Large Truck Crash - A crash involving one or more vehicles of the following type: (1) a 2-axel, 6-tire single unit truck or van, (2) a 3 or more axle single unit truck, (3) a single unit truck with one or more trailers, (4) a bobtail (power unit only), (5) a tractor with one or more trailers, (6) a concrete mixer, (7) a garbage/ dump truck, (8) an auto transporter, (9) a flatbed truck, and (10) a cargo tank.

Million Vehicle Miles Traveled - The number of miles traveled in a year for a given area, reported in millions. This is calculated by the Utah Department of Transportation.

Motorcycle Crash - A crash involving one or more motorcycles or mopeds.

Motor Vehicle Crash - A crash that involves a motor vehicle on public roadways.

Out of State Driver - A driver licensed from a state other than Utah who is involved in a crash. Some of these drivers may reside in the state of Utah, but have not yet applied for a Utah driver's license.

Seatbelt Use - Seatbelt use is reported for occupants in a passenger car, a light truck or van. Occupants are coded as wearing a seatbelt if they reported using a shoulder/lap belt, lap belt or a child safety seat at the scene of the crash (for the purpose of this report, occupants using only a shoulder strap were reported to be unbelted). In the majority of cases, seatbelt use as recorded by the investigating officer is self-reported by the crash occupant. It is possible that crash occupants may report using a seatbelt when they were not in order to avoid a citation or fine, thus over-inflating the seatbelt use rate. In the case of fatal or severe injury crashes the officer will determine the seatbelt use.

School Bus Crash - A crash involving one or more school buses.

Speed-Related Crash - A crash where the investigating officer cites one or more drivers for "speeding", or codes a contributing factor of "speed too fast".

Teenage Driver - A 15 to 19 year old driver.

Teenage Driver Crash - A crash involving a teenage driver.

Teenage Driver Injury Crash - An injury crash involving a teenage driver.

Teenage Driver Fatal Crash - A fatal crash involving a teenage driver.

Vehicular Homicide - Vehicular homicide, a third degree felony, is when a driver operates a motor vehicle while having a blood alcohol content of 0.08% or greater by weight, or while under the influence of alcohol, any drug, or the combined influence of alcohol or any drug, to a degree that renders the driver incapable of safely operating the vehicle, and causes the death of another by operating the vehicle in a negligent manner.

Violation - The traffic violation that a driver was cited for at the scene of the crash. These include both moving and non-moving violations.

Executive Summary

Death and disability associated with motor vehicle crashes continues to be a problem in the United States, as well as in the state of Utah. Great strides have been made to reduce the motor vehicle crash rate in Utah, and since 1969, the injury and fatal crash rates have steadily declined. In fact, the Utah 2000 crash rate of 236.0 per 100 million vehicle miles traveled represents a 2% decrease from the 1999 rate, and is the lowest crash rate in 30 years. This reduction can be attributed to a variety of factors including local and statewide traffic safety programs that have increased awareness of traffic safety issues, legislation mandating seatbelt use and graduated driver licensure, increased DUI legislation and enforcement, better engineered roadways, and safer vehicles. Despite this progress, motor vehicle crashes continue to take their toll. In Utah, a crash occurs every 10 minutes, a person is injured in a crash every 17 minutes, and a person dies every day from a motor vehicle crash.

In 2000, there were 53,151 crashes in Utah accounting for 30,086 injured persons and 373 fatalities. Overall, crash participants tended to be male and in the 15 to 24 year age group. Most crashes occurred in urban areas; however, rural crashes were 5 times more likely to result in a fatality than crashes occurring in urban areas. Increased speeds and longer response time for emergency medical services in the rural areas may account for the rural/ urban difference in fatal crash rates. Rear-end collisions (excluding "Other") were the leading collision type, but head-on collisions were 6 times more likely to result in a fatality than other collisions, and single vehicle rollovers were 5 times more likely to result in a fatality than other collisions. While passenger cars accounted for the majority of vehicles involved in Utah crashes, motorcycle- as well as large/semi truck-crashes were more likely to be fatal than crashes involving other vehicles.

Pedestrians, bicyclists, and motorcyclists involved in a motor vehicle crash are at high risk from suffering injury or death. In 2000, 94.4% of pedestrians, 91.2% of bicyclists, and 85.3% of motorcyclists involved in a motor vehicle crash experienced an injury or death compared to 21.6% of all motor vehicle crash participants. Pedestrians, bicyclists, and motorcyclists have little or no physical barrier between themselves and a motor vehicle or roadway, thus resulting in the high injury and death rate. As with seatbelts, helmets have proven to reduce severe injury and death for bicyclists and motorcyclists. Unfortunately, only 29.5% of motorcyclists involved in a crash were reported to be wearing a helmet.

Teenage drivers are another group that are of concern in Utah because of their high crash rates. Every 32 minutes, a crash occurs in Utah that involves a teenage driver. In 2000, approximately one-third of total crashes involved teenage drivers. Lack of driving experience may contribute to the higher crash rates for teenage drivers. A graduated driver licensing law was passed in Utah in 1998 to help address some of these concerns. The law requires teenage drivers to gain more supervised driving experience before receiving their driver license, and places restrictions on the time of day teenage drivers are allowed to drive. Because crashes where the teenage driven vehicle contained four or more occupants were twice as likely to be fatal than crashes involving teenage driven vehicles with fewer occupants, local traffic safety entities focused legislative efforts on creating a more comprehensive graduated driver licensing law. The law was modified in 2000 to include passenger limitation.

Speeding and impaired driving are contributing factors that led to severe injury or death in motor vehicle crashes. In 2000, there were over 7,725 speed-related crashes resulting in 111 fatalities. The majority of the speed-related crashes occurred on a highway. In 2000, 2,163 crashes were attributed to alcohol and other drug involvement resulting in 90 fatalities. This was a 25.0% increase in alcohol and other drug-related crash fatalities from 1999. While alcohol and drug-related crashes are of great concern nationwide, speeding appears to be the leading factor associated with crash fatalities and may warrant increased attention in Utah.

Seatbelts have been shown to save lives and decrease the severity of injuries in motor vehicle crashes. In Utah, unbelted occupants were 12 times more likely to sustain a fatal injury than belted occupants. Overall, 91.9% of the occupants involved in a crash in 2000 reported using a seatbelt, but seatbelt use rates varied by age and type of crash. Children under the age of 5 years had the highest percentage of seatbelt use (96.4%), while those aged 10 to 14 years experienced the lowest percentage of use (88.6%). Unfortunately, the rate for seatbelt use for fatalities was much lower; only 40.6% of the occupants who died in a crash were reported as wearing a seatbelt. In addition, the majority of ejected occupants (who often suffer severe injury or death) were not wearing a seatbelt. Utah law requires all children under the age of 19 years to be properly restrained in a motor vehicle. Children under the age of 5 years must ride in an approved child safety seat, and children aged 5 to 19 years must ride in an approved child safety seat or seatbelt.

Motor vehicle crashes in Utah continue to be a leading cause of death and disability in the state. Of particular concern are speed-related crashes, crashes involving pedestrians and motorcyclists, and teenage driver crashes. Many people have worked together to address these and other traffic-safety-related issues. However, an overwhelming number of people are affected by motor vehicle crashes, and traffic safety needs to remain a top priority in Utah.

Crash Synopsis
2000

Crashes, Injury Crashes and Fatal Crashes

- 53,151 motor vehicle crashes were reported, a less than 1% increase from 1999.
- Over 19,500 injury crashes were reported, the same as 1999.
- 318 fatal motor vehicle crashes were reported 2000, the same number as in 1999.
- Sundays had nearly double the odds for a fatal crash than any other day of the week.
- The July 24th holiday weekend had the highest fatal crash rate per day among holidays.
- Head-on collisions were 6 times more likely to be fatal than other collision types.
- Drivers cited for driving under the influence were 10 times more likely to be involved in a fatal crash than drivers cited for other violations.
- Drivers between the age of 15 and 19 years old had the highest crash, and injury crash rates per licensed driver whereas drivers aged 20 to 24 year old had the highest fatal crash rates per licensed driver.
- Out of state drivers were involved in 9% of crashes and 19% of fatal crashes.

Crash Participants, Injured Persons and Fatalities

- 373 crash related fatalities occurred, a 4% increase from 1999.
- For every 81 persons injured in a motor vehicle crash, one person was killed.
- Front seat passengers (excluding drivers) were 1.2 times more likely than back seat passengers to sustain a fatal injury.
- Crash participants over the age of 65 years were 3 times more likely to be killed than all other age groups.

Pedestrian Crashes

- 785 pedestrians were involved in pedestrian-motor vehicle crashes.
- 33 pedestrians were killed, a 13% decrease from 1999.
- Half (49%) of the pedestrians involved in a motor vehicle crash were under the age of 20 years.
- 32% of the drivers involved in pedestrian crashes were aged 15 to 24 years.

Bicyclist-Motor Vehicle Crashes

- 706 bicyclists were involved in motor vehicle crashes, a 17% decrease from 1999.
- 9 bicyclist were killed.
- 29% of the motor vehicle drivers involved in bicyclist-motor vehicle crashes were 15 to 24 years of age.

Motorcycle Crashes

- 733 crashes involved motorcycles, an 8% increase from 1999.
- 21 motorcycle crashes were fatal.
- 85% of the motorcyclists in crashes were male.
- 30% of motorcyclists involved in crashes were wearing a helmet.

Crash Synopsis
2000

Teenage Driver Crashes

- 16,578 crashes and 63 fatal crashes involved a teenage driver.
- Half (49%) of all teenage drivers involved in a crash received a citation for a violation.
- Of the 63 teenager driver fatal crashes 14 involved alcohol or other drugs.
- Teenage driver crashes that the teenage driven vehicles had 4 or more occupants were 5 times more likely to be fatal than crashes involving teenage driven vehicles with fewer occupants.

Alcohol and Other Drug-Related Crashes

- 2,163 (4%) crashes and 79 (24%) fatal crashes involved alcohol or other drugs.
- 90 fatalities were a result of alcohol and other drug-related crashes, a 25% increase from 1999.
- Male drivers were involved in over three-quarters (79%) of alcohol and other drug-related crashes.
- 16% of the impaired drivers were under the age of 21 years.
- 82% of drunk drivers involved in fatal crashes had a blood alcohol level above the legal limit of 0.08.

Speed-Related Crashes

- 7,725 (15%) crashes and 104 (33%) fatal crashes were speed-related.
- 111 person were killed in speed-related crashes.
- The highest percentage of drivers involved in speed-related crashes were aged 15 to 19 years for both male and female drivers.

Occupant Protection

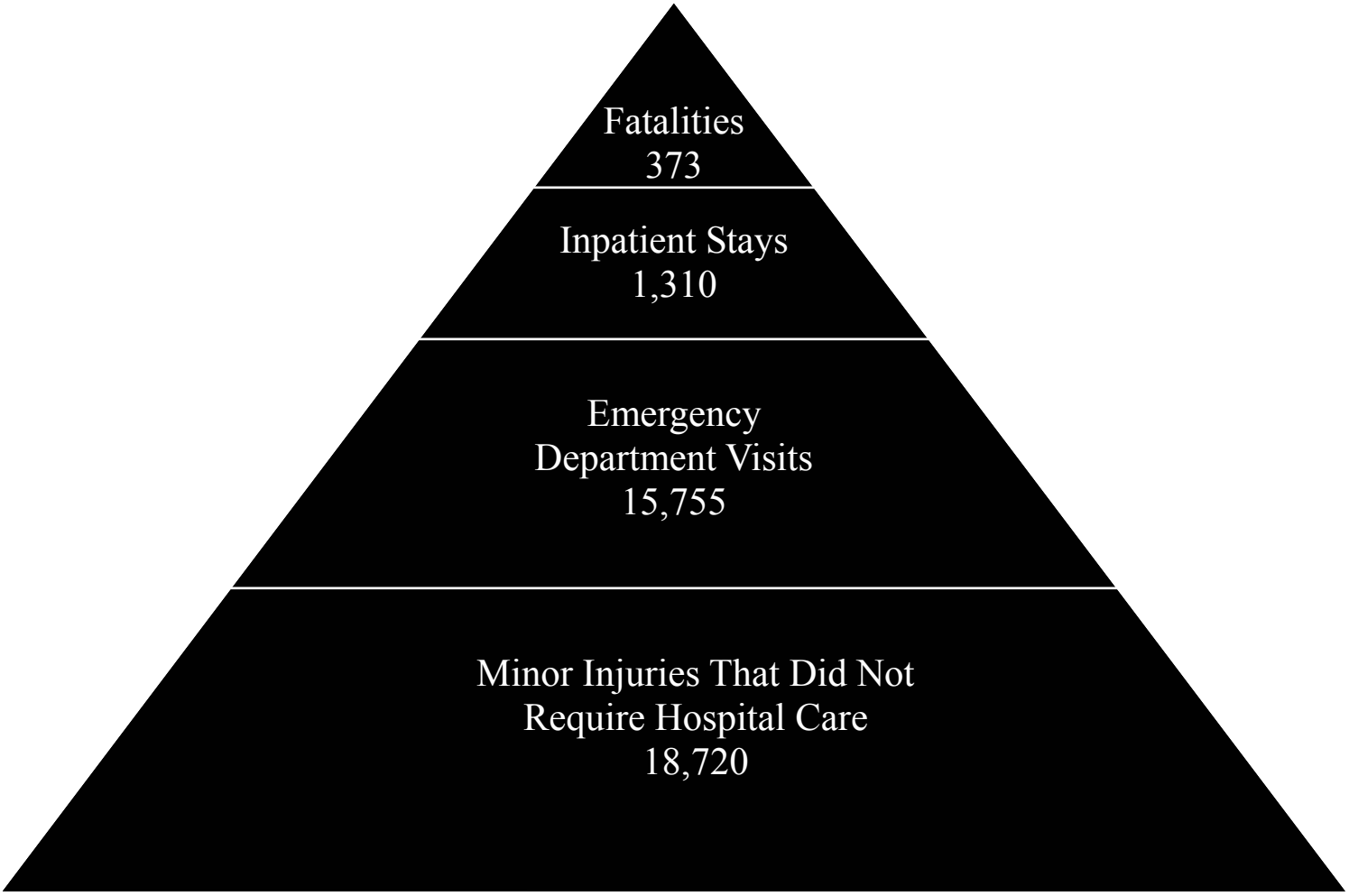
- 92% of all crash participants, 83% of injured crash participants and 41% of the fatalities were reported as using a seatbelt.
- Unbelted occupants were 12 times more likely to be killed than belted occupants.
- 90% of the ejected passengers were not wearing a seatbelt.
- Children under the age of 2 years were 5 times more likely to be in a child safety seat than children between the ages of 2 to 4 years.
- Children in the back seat were 4 times more likely to be in a child safety seat than children in the front seat.

Utah Crash Clock

In the year 2000;

- One crash occurred every 10 minutes
- One person was injured in a crash every 17 minutes
- One person died in a crash every 23 hours
- One pedestrian was in a crash every 11 hours
- One pedestrian fatality occurred every 11 days
- One bicyclist was in a crash every 12 hours
- One motorcyclist was in a crash every 12 hours
- One motorcycle fatality occurred every 16 days
- One teenage driver crash occurred every 32 minutes
- One teenage driver fatal crash occurred every 6 days
- One alcohol and other drug-related crash occurred every 4 hours
- One speed-related crash occurred every hour
- One unbelted occupant died every 2 ½ days

Utah Motor Vehicle Crash Injury Pyramid



Note: Data based on crash records from the year 2000 and emergency department visits and inpatient stays which are estimated based on Utah CODES research from 1996 and 1997.